$a_n = a_1 r^{n-1}$

(8) $1\left(\frac{9}{10}\right)^4 = 65.6\%$

(9) 2, 4, 8 $\quad S_n = \frac{2(1-2^6)}{1-2} = \frac{2(1-64)}{-1} = 126$ + principal

127

(10) 20, 17, 14, ..., 2 $\quad 2 = 20 + (n-1)(-3)$

$-18 = -3n + 3$

$-21 = -3n$

$7 = n$

7 rows

77 cans

$S_7 = \frac{(20+2)7}{2}$

(11) $25000(1.05)^5 = \$31,907.04$

(12) $1+2+3+\ldots+12$

$S_{24} = \frac{(1+12)12}{2} = 78 \times 2 = 156$

(13) $S_n = \frac{9600(1-1.05^6)}{1-1.05}$ (800 × 12) $= \$65,298.36$

(14) 85, 79, 73, ..., 1 $\quad a_{12} = 85 + 11(-6)$

$= 19$ in 12th row

$1 = 85 + (n-1)(-6)$

$-84 = -6n + 6$

$-90 = -6n$

rows $15 = n$

$S_n = \frac{(85+1)15}{2}$

$= 645$ bricks